# Shuttle Engine Designs Revolutionize Solar Power

***Marshall Space Flight Center***

***SolarReserve***
***Santa Monica, California***


## NASA Technology

- The Space Shuttle Main Engine was built under contract to NASA in the 1970s by Rocketdyne, now part of Pratt & Whitney Rocketdyne (PWR)
- PWR's NASA work allowed it to glean expertise in handling high heat flux, extreme temperatures, and cyclic temperature gradients over long periods

## Partnership

- With funding from the Department of Energy (DOE) and industry, PWR leveraged its NASA experience to develop large demonstrations of solar power tower plant technology: Solar One and Solar Two
- A decade later, PWR granted an exclusive license of its NASA spinoff solar technology to SolarReserve, which now develops concentrating solar power that is 100 percent renewable with no harmful emissions

## Benefits

- The technology can provide electricity from the Sun on-demand, even after dark or when cloudy
- The company is constructing a plant in Nevada to power 75,000 homes during peak electricity periods, creating more than 4,300 jobs
- SolarReserve has numerous upcoming installation projects